

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,661	11/13/2003	David Dening	2867-193	2609
27820	7590 02/04/2005		EXAMINER	
WITHROW	& TERRANOVA, P.L.L.	NGUYEN, I	NGUYEN, KHANH V	
P.O. BOX 1287			ADTIBUT	DADED MUMPED
CARY, NC 27512			ART UNIT	PAPER NUMBER
			2817	
			DATE MAILED: 02/04/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Q}	
v	

	Application No.	Applicant(s)				
Office Action Summany	10/712,661	DENING, DAVID				
Office Action Summary	Examiner	Art Unit				
	Khanh V. Nguyen	2817				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
	Responsive to communication(s) filed on <u>13 November 2003</u> .					
· <u> </u>	,—					
	<del>, _</del>					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-26 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-9.11-22 and 24-26 is/are rejected.</li> <li>7)  Claim(s) 10 and 23 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/13/03	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2817

#### **DETAILED ACTION**

### **Drawings**

The drawing (Fig. 2) is objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "node connected between transistor (Q1) and BIASING NETWORK (66) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Objections

Claims 12, 25 are objected to because of the following informalities: "output matching circuitry" should correctly be --output matching network--. Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 9, 11, 20, 22, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A bias network coupled to the input of transistor (Q1) of Figure 2 is not shown, since there is no "node" coupled between "bias network" and transistor (Q1).

Claims 11, 24 recite the limitation "the wideband power amplifier". There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 10/712,661

Art Unit: 2817

Claims 1-6, 8, 12-19, 21, 25, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Steel et al. (6,658,265).

Regarding claim 1, Steel et al. (Fig. 3) disclose a matching network for a dual mode RF amplifier comprising; inputs adapted to receive radio frequency signals GSM (880 and 920 MHz and DSC (1710 and 1785 MHz); transistors (Q1, Q4) can be read as an array of transistors having inputs and outputs; matching circuits (N1, N2), wherein either matching circuit (N1 or N2) can be read as claimed first and second matching circuit.

Regarding claims 2, 15, wherein capacitors (C1, C3) can be read as claimed first and second capacitive circuits.

Regarding claims 3, 16, wherein inductors (L1, L2) can be read as claimed first and second inductive circuits.

Regarding claims 4, 17, wherein the characteristic of inductors (L1, L2) is inherently seen.

Regarding claims 5, 6, 18, 19, wherein inductors (L1, L2) are connected to ground/source voltage.

Regarding claims 8, 21, wherein transistors (Q1, Q4) can be read as either first and second amplification circuitry.

Regarding claims 12, 13, 25, 26 wherein the reference circuit discloses output matching network (54) coupled to an antenna, which can be read as a radiation circuitry.

Art Unit: 2817

Regarding claim 14 which is similar to claim 1, only specifies the intended uses of the invention which are not given any patentable weight as they do not materially effect to the final product claimed, wherein the reference circuit is used in the communication system having a modulator which is known for providing multiple frequency bands.

#### Allowable Subject Matter

Claims 10, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10, 23 call for, among others, operation of the frequency bands.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references (Adar (5,774,017); Meadows (6,091,966)) disclose dual mode amplifier.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Application/Control Number: 10/712,661

Art Unit: 2817

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KHANH VAN NGUYEN PRIMARY EXAMINER

Thanklankgupe

**Art Unit: 2817**